



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,866	10/29/2003	Isao Hasegawa	24394 IUS3	5697
22850	7590	03/22/2006		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER LUM VANNUCCI, LEE SIN YEE	
			ART UNIT 3611	PAPER NUMBER
DATE MAILED: 03/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/694,866	HASEGAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lee Lum	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-15 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-15 and 18-20 is/are allowed.
- 6) ☒ Claim(s) 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. An Amendment was filed 1/20/06 in which Claims 21-24 were also added. The Claims presented for examination are 1, 2, 5-15, 18-24.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuhisa et al, Japan 2001 30921A, in view of Masahiko et al, Japan 2000-211541.

Katsuhisa discloses a transfer ratio varying apparatus for a vehicle comprising  
Actuator (unidentified; "steering device" described beginning with p4, "Subject of the  
Invention"),

Steering shaft 2 transmitting an angle of a steering wheel (unidentified, inherent),  
Damper 5 positioned at the steering shaft to absorb vibration caused by the actuator (p4,  
"Subject of the Invention"),

Flexible coupling 1 connecting an input portion 3 of the actuator, and steering shaft 2,  
comprising

First yoke 11 fixed at steering shaft 2,

Main body 1 with elastic member, fixed to the yoke by first bolt 22 extending  
along an axis of the yoke, the body composed at least in part of rubber (i.e., element 7),  
and at least in part of a metal (i.e., element 6),

Second yoke 31 fixed at the body by second fastener (unidentified), and fixed at  
the input part (adjacent steering shaft 2),

The damper being fixed to the first yoke by the first bolt.

Art Unit: 3611

The reference does not disclose a gearbox, while Masahiko shows this well-known component 30 in a steering system, as depicted in fig 1. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this arrangement, as shown in Masahiko, to effect ratios for steering, thus increase steering capability and safety. This element is extremely well-known.

3. **Claims 1, 2, 5-15 and 18-20 are allowable** because prior art does not disclose the invention described above further comprising the actuator as including an input shaft that rotates with a housing.

4. The prior art found pertinent to the disclosure, but not relied upon, includes:  
Fujiu et al 6099036, Sato et al 5946977, Yamada et al 5836821, Moriyama et al 5580314, Bausch et al 4741408.

5. RESPONSE TO REMARKS

The new claims have been rejected as provided above. Applicant is asked to note allowable subject matter.

Art Unit: 3611

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


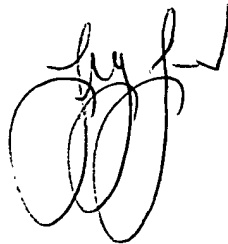
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Communication with the Examiner/USPTO

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 571 272-6649, M-F, 9-5. If she cannot be reached, her supervisor, Ms. Lesley Morris, may be reached at 571 272-6651. Our central fax number is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. For unpublished applications - private PAIR only. For published applications - private or public PAIR. For more information re PAIR - <http://pair-direct.uspto.gov>. Questions re private PAIR - contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum-Vannucci  
Examiner  
3/13/06



PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600